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| 10/730,603 | 12/08/2003 | Kamel M. Shaheen | I-2-0490.1US | 4022 |

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| EXAMINER |
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HOM, SHICK C

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| ART UNIT | PAPER NUMBER |
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2616

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 02/23/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/730,603

Applicant(s)

SHAHEEN, KAMEL M.

Examiner

Shick C. Horn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/26/06 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

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the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaskar et al. (2004/0196808) in view of Kuehnel et al. (5,907,542).

Chaskar et al. disclose a wireless terminal for use in a wireless network, able to handover a communication from a first access point (AP) associated with a first access router (AR) in a first extended service set (ESS) to a second AP associated with a second AR in a second ESS (In Fig. 2, see the wireless terminal MT, the access points BS1, BS2; the associated access routers AR1, AR2, and the first and second service area SA1, SA2 connected to ISP1 and ISP2 which correspond to the first and second ESS, respectively) the wireless terminal comprising:

in response to losing a connection with the first AP, a device for forming a re-association message which includes an identity of the first AP and the first ESS; and a transmitter for sending the re-association message to the second AP (see the abstract and paragraph 0033 which recite that when the mobile terminal moves from the first service area to the second service area, the mobile terminal transmits to the second access router the address of the previous access router)

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the second AR, responsive to receiving the information regarding the first AR from the second AP, contacting the first AR; the first AR, responsive to being contacted by the second AR, rerouting traffic for the terminal to the second AR; and the second AR reestablishing a session between the terminal and the second AP (see Fig. 3 and paragraphs 0025-0026, the exchange functions 303 and 305 of AR1 and AR2 being connected to exchange information between the routers for the purpose of handover) as in claims 16, 20, 24, 28-30.

Chaskar et al. disclose all the subject matter of the claimed invention with the exception of the second AP sending to the terminal a re-association success message as in claims 16, 20, 24, and 30; the re-association message further includes an identity of the second AP as in claims 17, 21, 25, 28; the first AR releasing resources in the first ESS that had been used by the terminal and/or reserved for the use of the terminal as in claims 19, 23, and 27; and a distribution system in the second ESS failing to recognize the first AP; the re-association success message indicating to the terminal that the first AP was not recognized; and the terminal initiating the handoff procedure in response to receiving the re-association success message as in claims 18, 22, 26.

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Kuehnel et al. from the same or similar fields of endeavor teach that it is known to provide the second AP sending to the terminal a re-association success message (see col. 5 lines 13 to col. 6 line 18 which describes the registration processing for associating the terminal to the access point including the transmission of a confirmation message whereby registration may be combined with authentication and accounting clearly reads on the reassociation success message as in claims 16, 20, 24, and 30);

the re-association message further includes an identity of the second AP (see col. 7 lines 27-35 which recite that it is known to provide the identity of the second AP in re-association message as in claims 17, 21, 25, 28);

a distribution system in the second ESS failing to recognize the first AP; the re-association success message indicating to the terminal that the first AP was not recognized; and the terminal initiating the handoff procedure in response to receiving the re-association success message; and the first AR releasing resources in the first ESS that had been used by the terminal and/or reserved for the use of the terminal (see col. 6 lines 57 to col. 7 line 26 recites re-issuing another handover request if the request has failed and sending a message to determine which AP the terminal is attached to and the step of

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freeing pending connections as in claims 18-19, 22-23, and 26-27.

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the second AP sending to the terminal a re-association success message; the re-association message further includes an identity of the second AP; the first AR releasing resources in the first ESS that had been used by the terminal and/or reserved for the use of the terminal; and a distribution system in the second ESS failing to recognize the first AP; the re-association success message indicating to the terminal that the first AP was not recognized; and the terminal initiating the handoff procedure in response to receiving the re-association success message as taught by Kuehnel et al. to the communications method and terminal of Chaskar et al.

The second AP sending to the terminal a re-association success message; the re-association message further includes an identity of the second AP; the first AR releasing resources in the first ESS that had been used by the terminal and/or reserved for the use of the terminal; and a distribution system in the second ESS failing to recognize the first AP; the re-association success message indicating to the terminal that the first AP was not recognized; and the terminal initiating the handoff

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procedure in response to receiving the re-association success message can be implemented by providing the second AP for sending to the terminal a re-association success message; the re-association message including an identity of the second AP; the first AR releasing resources in the first ESS that had been used by the terminal and/or reserved for the use of the terminal; and a distribution system in the second ESS failing to recognize the first AP; the re-association success message indicating to the terminal that the first AP was not recognized; and the terminal initiating the handoff procedure in response to receiving the re-association success message of Kuehnel et al. in the method for handover of Chaskar et al.

The motivation for providing the second AP sending to the terminal a re-association success message; the re-association message further includes an identity of the second AP; the first AR releasing resources in the first ESS that had been used by the terminal and/or reserved for the use of the terminal; and a distribution system in the second ESS failing to recognize the first AP; the re-association success message indicating to the terminal that the first AP was not recognized; and the terminal initiating the handoff procedure in response to receiving the re-association success message as taught by Kuehnel et al. in the communication method of Chaskar et al. being that it

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provides more reliability for the system since the terminal receives a re-association success or a not recognized messages and it provides more efficiency for the system since the identity of the second AP is provided and the first AR releasing resources no longer needed in the system.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee et al. disclose a method for performing handoff in wireless network priority.

Brennan et al. disclose forced beam switching in wireless communication systems having smart antennas.

Terry discloses a system and method for integrating WLAN and 3G.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the

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organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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